

**IN THE CLAIMS:**

Claims 1-3, 27-28, and 46-48 have been amended herein. Claim 49 has been added. All of the pending claims are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

**Listing of Claims:**

1. (Currently Amended) A method for producing mRNA encoding a *Plasmodium falciparum* apical membrane antigen-1 (AMA-1) ectodomain[[,]] or a fragment thereof[[,]] in a yeast cell, said method comprising:  
providing said yeast cell with a nucleic acid encoding said ectodomain or said fragment thereof,  
wherein said ectodomain comprises amino acid sequence 25-545 of SEQ ID NO:7, and  
wherein the fragment thereof comprises an amino acid sequence selected from the group consisting of 25-442, 97-442, and 97-545 of SEQ ID NO: 67, ~~wherein the encoding nucleic acid comprises a nucleotide sequence of FIG. 1 encoding the ectodomain or the fragment thereof, and~~ wherein at least one glycosylation site is has been removed from said ~~*Plasmodium falciparum* AMA-1~~ ectodomain or said fragment thereof, and wherein said nucleic acid encoding said ectodomain[[,]] or fragment thereof[[,]] is has been modified to utilize said yeast cell's codon usage, and wherein mAb 4G2 exhibits specificity for said *Plasmodium falciparum* AMA-1 ectodomain or the said fragment thereof ~~exhibits specificity for mAb 4G2; and~~  
expressing said nucleic acid in said yeast cell, thus producing the mRNA encoding the ectodomain or the fragment thereof.
2. (Currently Amended) The method according to claim 1, further comprising ~~expressing-translating said nucleic acid~~ mRNA encoding the ectodomain or the fragment thereof into a *Plasmodium falciparum* AMA-1 ectodomain peptide or a fragment peptide thereof in said yeast cell.
3. (Currently Amended) The method according to claim 2, further comprising purifying said ~~*Plasmodium* AMA-1 ectodomain peptide~~ or said fragment peptide thereof.

4. (Previously Presented) The method according to claim 1, wherein at least one putative yeast polyadenylation consensus sequence in the nucleic acid has been modified.

5. through 7. (Canceled).

8. (Previously presented) The method according to claim 1, wherein the mRNA encoding *Plasmodium falciparum* AMA-1 ectodomain, or fragment thereof, comprises mRNA encoding *Plasmodium falciparum* Vietnam-Oak Knoll strain ectodomain.

9. (Previously Presented) The method according to claim 1, wherein said yeast cell is *Pichia*.

10. (Previously Presented) The method according to claim 9, wherein said yeast cell is *Pichia pastoris*.

11. through 26. (Canceled).

27. (Currently Amended) A process for producing a *Plasmodium falciparum* apical membrane antigen-1 (AMA-1) ectodomain or a fragment thereof, said method comprising: providing a yeast cell with an isolated or recombinant nucleic acid encoding *Plasmodium falciparum* AMA-1 said ectodomain or ~~[[a]]~~ said fragment thereof, wherein said ectodomain comprises amino acid sequence 25-545 of SEQ ID NO:7, and wherein the fragment thereof comprises an amino acid sequence selected from the group consisting of 25-442, 97-442, and 97-545 of SEQ ID NO: 67,~~wherein the encoding nucleic acid comprises a nucleotide sequence encoding the ectodomain or the fragment thereof of FIG. 1,~~and wherein at least one glycosylation site is has been removed from said *Plasmodium falciparum* AMA-1 ectodomain or said fragment thereof, and wherein said nucleic acid is has been modified to utilize a yeast cell's codon usage, and wherein mAb 4G2 exhibits specificity for said *Plasmodium falciparum* AMA-1 ectodomain or the said fragment thereof exhibits specificity for mAb 4G2;  
expressing said nucleic acid into said ectodomain or said fragment thereof; and  
collecting ~~formed said *Plasmodium falciparum* AMA-1~~ said ectodomain or said fragment thereof.

28. (Currently Amended) The process of claim 27, further comprising purifying said ~~formed *Plasmodium* AMA-1~~ said ectodomain or said fragment thereof.

29. (Previously Presented) The process of claim 27, wherein said yeast cell is *Pichia*.

30. (Previously Presented) The process of claim 29, wherein said yeast cell is *Pichia pastoris*.

31. through 45. (Canceled).

46. (Currently Amended) A method for producing mRNA encoding a fragment of a *Plasmodium falciparum* apical membrane antigen-1 (AMA-1) ectodomain in a yeast cell, said method comprising:

providing said yeast cell with a nucleic acid encoding said fragment ~~of said ectodomain~~, wherein the fragment thereof comprises an amino acid sequence selected from the group consisting of 25-442, 97-442, and 97-545 of SEQ ID NO: 67, ~~wherein the encoding nucleic acid comprises a nucleotide sequence encoding the fragment thereof of FIG. 1,~~ and wherein at least one glycosylation site is has been removed from said ~~*Plasmodium falciparum* AMA-1 ectodomain~~ fragment, and wherein said nucleic acid is has been modified to utilize said yeast cell's codon usage, and wherein mAb 4G2 exhibits specificity for said *Plasmodium falciparum* AMA-1 ectodomain fragment ~~exhibits specificity for mAB4G2;~~ and expressing the nucleic acid in the yeast cell, thus producing the mRNA encoding the fragment.

47. (Currently Amended) A method for producing a fragment of a *Plasmodium falciparum* apical membrane antigen-1 (AMA-1) ectodomain, said method comprising:

providing said a yeast cell with an isolated or recombinant nucleic acid encoding [[a]] the fragment ~~of a *Plasmodium falciparum* AMA-1 ectodomain~~, wherein the fragment ~~thereof~~ comprises an amino acid sequence ~~residues~~ selected from the group consisting of 25-442, 97-442, and 97-545 of SEQ ID NO: 67, ~~wherein the encoding nucleic acid comprises a nucleotide sequence encoding the fragment thereof of FIG. 1,~~ and wherein at least one glycosylation site is has been removed from said ~~*Plasmodium falciparum* AMA-1 ectodomain~~ fragment, and wherein said nucleic acid is has been modified to utilize said yeast cell's codon usage, and wherein mAb 4G2 exhibits specificity for said *Plasmodium falciparum* AMA-1 ectodomain fragment ~~exhibits specificity for mAB4G2;~~ expressing the nucleic acid into the fragment; and collecting the formed fragment of *Plasmodium falciparum* AMA-1.

48. (Currently Amended) A method for producing mRNA encoding a *Plasmodium falciparum* apical membrane antigen-1 (AMA-1) ectodomain[[,]] or a fragment thereof[[,]] in a yeast cell, the method comprising:

providing the yeast cell with a nucleic acid encoding the ectodomain or the fragment thereof, wherein the ectodomain comprises amino acid sequence 25-545 of SEQ ID NO:7, and wherein the fragment thereof comprises an amino acid sequence selected from the group consisting of 25-442, 97-442, and 97-545 of SEQ ID NO: 67, ~~wherein the encoding nucleic acid comprises a nucleotide sequence of FIG. 1 encoding the entire ectodomain or the entire fragment thereof,~~ and wherein at least one eukaryotic glycosylation site is has been removed relative to a wild-type *Plasmodium falciparum* AMA-1 ectodomain or a fragment thereof, and wherein the nucleic acid ~~encoding the ectodomain, or the fragment thereof,~~ is has been modified to utilize said yeast cell's codon usage, and wherein mAb 4G2 exhibits specificity for the *Plasmodium falciparum* AMA-1 ectodomain or the fragment thereof exhibits specificity for mAb 4G2; and

expressing the nucleic acid, thus producing the mRNA encoding a *Plasmodium falciparum* AMA-1 ectodomain or the fragment thereof.

49. (New) A method for producing mRNA encoding a *Plasmodium falciparum* apical membrane antigen-1 (AMA-1) ectodomain or a fragment thereof in a yeast cell, said method comprising:

providing the yeast cell with a nucleic acid encoding the ectodomain or the fragment thereof, wherein the ectodomain or the fragment thereof comprises the amino acid sequence 97-442 of SEQ ID NO:7, and wherein at least one glycosylation site has been removed from the ectodomain or the fragment thereof, and wherein the nucleic acid encoding the ectodomain or the fragment thereof has been modified to utilize the yeast cell's codon usage, and wherein mAb 4G2 exhibits specificity for the ectodomain or the fragment thereof; and

expressing the nucleic acid in the yeast cell, thus producing the mRNA encoding the ectodomain or the fragment thereof.